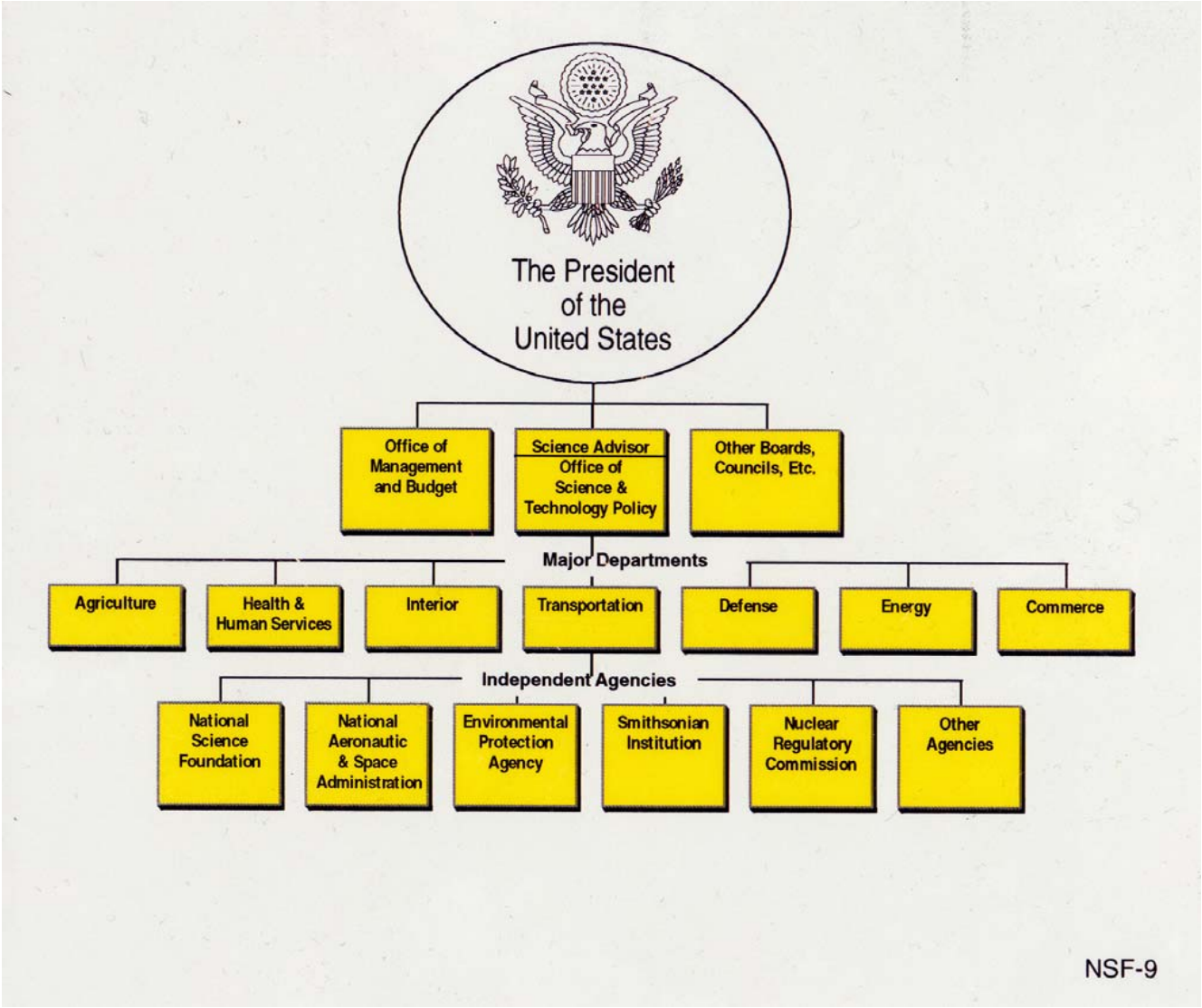
The National Science Foundation Manager of the U.S. Antarctic Program

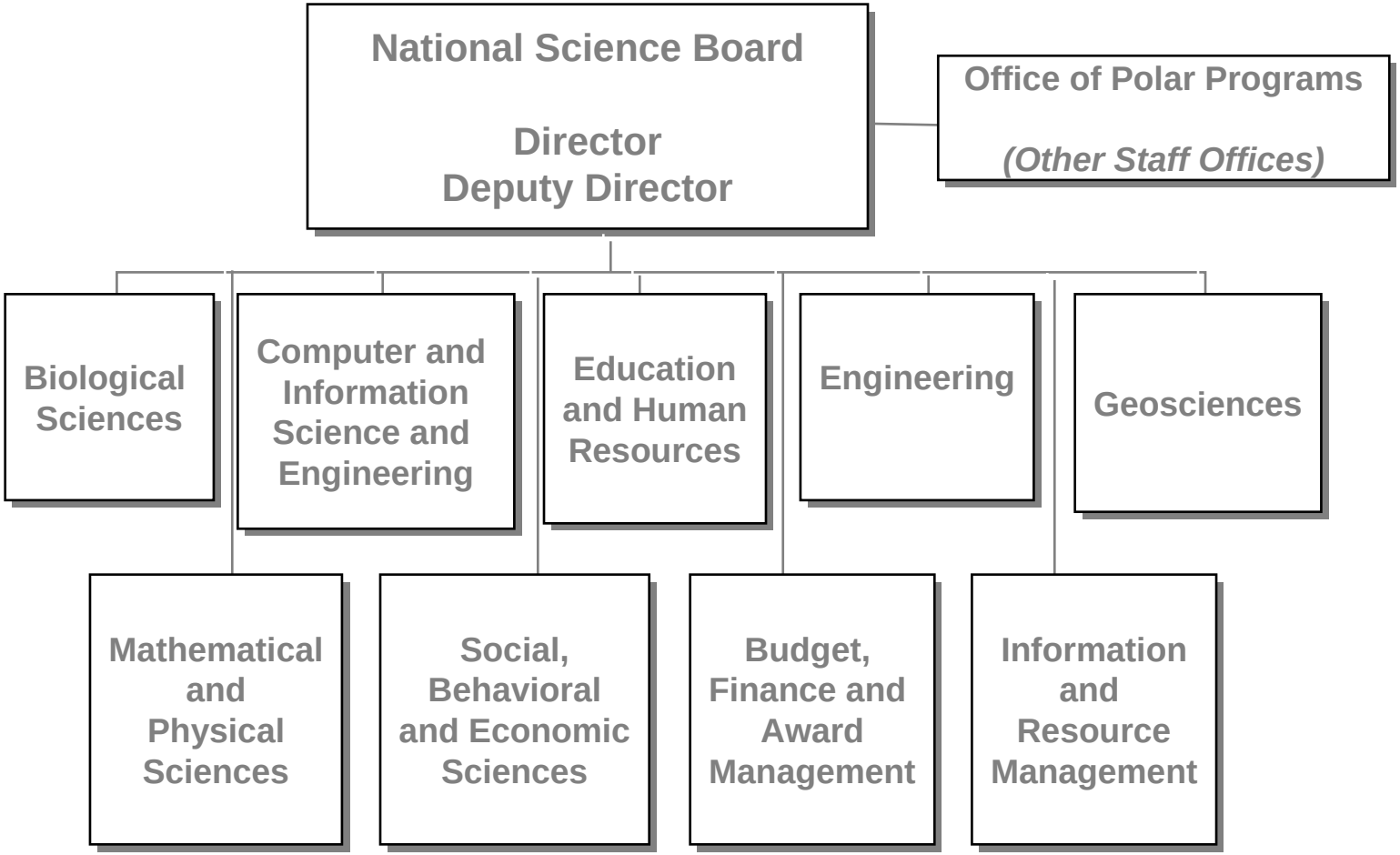
Brian Stone


The President of the United States
Office of Management and Budget
Science Advisor
Office of Science & Technology Policy
Other Boards, Councils, Etc.
Major Departments
Agriculture
Health & Human Services
Interior
Transportation
Defense
Energy
Commerce
Independent Agencies
National Science Foundation
National Aeronautic & Space Administration
Environmental Protection Agency
Smithsonian Institution
Nuclear Regulatory Commission
Other Agencies
NSF-9

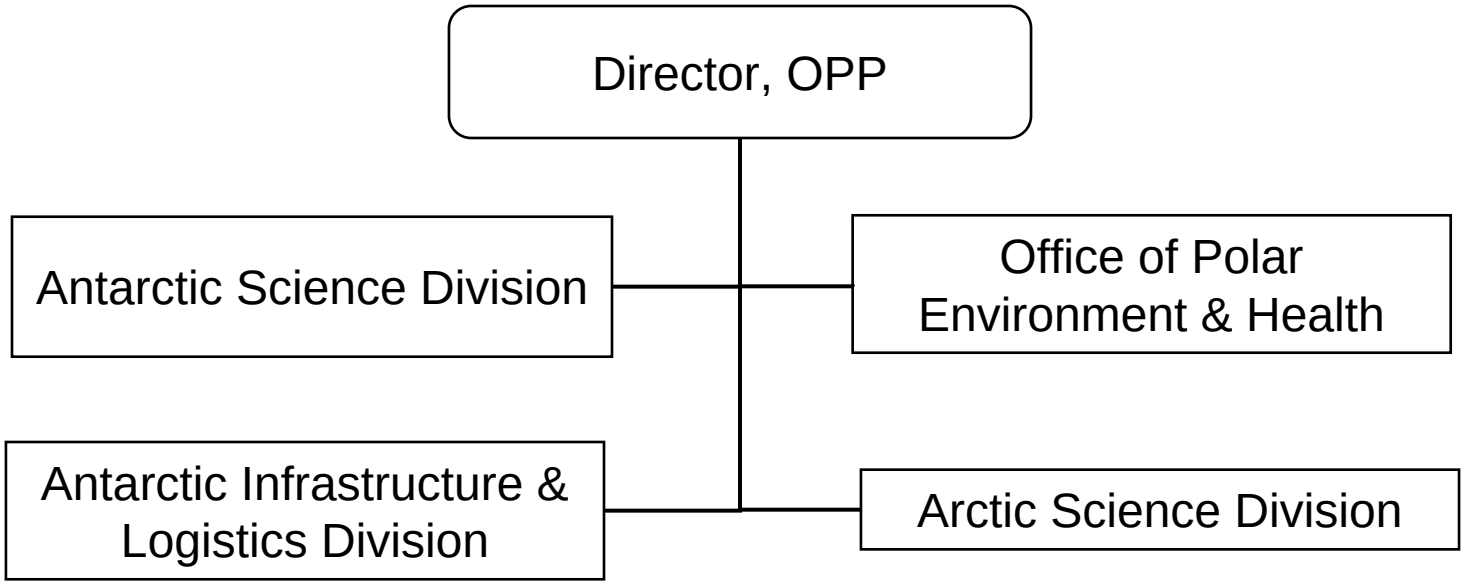
A Word About NSF

- Vision – Advancing discovery, innovation and education beyond the frontiers of current knowledge, and empowering future generations in science and engineering.
  - Ensure a world-class science/engineering workforce and promote public understanding of science
  - Support basic research and education through grants and related mechanisms

National Science Foundation



Office of Polar Programs



OPP FY2009 Budget Request

Office of Polar Programs Funding

(Dollars in Millions)

	FY 2007 Actual	FY 2008 Estimate	FY 2009 Request	Change over FY 2008 Estimate Amount	Change over FY 2008 Estimate Percent
Arctic Sciences (ARC)	$89.27	$90.85	$103.97	$13.12	14.4%
Antarctic Sciences (ANT)	56.65	60.35	71.24	10.89	18.0%
Antarctic Infrastructure & Logistics (AIL)	233.76	228.36	255.02	26.66	11.7%
U.S. Antarctic Logistical Support Activitie	*67.52*	*67.52*	*67.52*	-	-
Polar Environment, Safety & Health (PESH)	5.79	5.98	6.74	0.76	12.7%
USCG PolarIcebreaking[1/]	52.96	57.00	54.00	-3.00	-5.3%
Total, OPP	$438.43	$442.54	$490.97	$48.43	10.9%

Totals may not add due to rounding.

[1/] Represents all funding to U.S. Coast Guard. In FY 2007, NSF chartered the icebreaker *Oden* as a back-up to the USCG's *Polar Sea*. The *Oden* will again be chartered for FY 2008 and FY 2009. Funds may become available from this line to contribute to defraying the costs of back-up icebreakers.

Antarctic Treaty System

- Treaty signed 1959, entered into force 1961
- 46 member nations as of 2007
- Territorial claims in abeyance
- Reserved for peaceful uses, commitment to conservation, environmental protection, and scientific research

Antarctic Treaty System

– Some 170 provisions and conventions resulting from periodic and special consultative meetings

- Protection of special areas, historic monuments
- Conservation of fauna and flora (1964)
- Conservation of seals (1978)
- Conservation of marine living resources (1982)
- Protocol on Environmental Protection (1998)

Major USAP Policy Milestones

1960	Executive Branch responsibilities for USAP established post IGY (OMB A-51)
1970	Management of USAP transferred from DoD to NSF. “Active & influential presence” affirmed. (NSDM-71)
1976	NSF management and “active & influential” presence reaffirmed. (NSDM-318)
1982	“Active & influential” presence reaffirmed. (6646)
1993	Navy announces intention to withdraw.
1994	Four objectives of US policy. (NSC-26)
1996	NSTC review establishes need for three stations.
1997	Report of the USAP External Panel examines plans to modernize South Pole.
1999	US Air Force assumes DoD executive agent.

Memorandum 6646 (1982)

- "The United States Antarctic Program shall be maintained at a level providing an active and influential presence in Antarctica…"
  - "This presence shall include the conduct of scientific activities in major disciplines; year-round occupation of South Pole and two coastal stations..."
  - "Every effort shall be made to manage the program in a manner that maximizes cost effectiveness and return on investment."
- "NSF shall:
  - "budget for and manage the entire United States National Program in Antarctica, including logistic support activities so that the program may be managed as a single package;"
  - "fund university research and federal agency programs related to Antarctica;"
  - "draw upon logistic support capabilities of government agencies on a cost reimbursable basis;"
  - "use commercial support and management facilities where these are determined to be cost-effective and will not…be detrimental to the national interest."

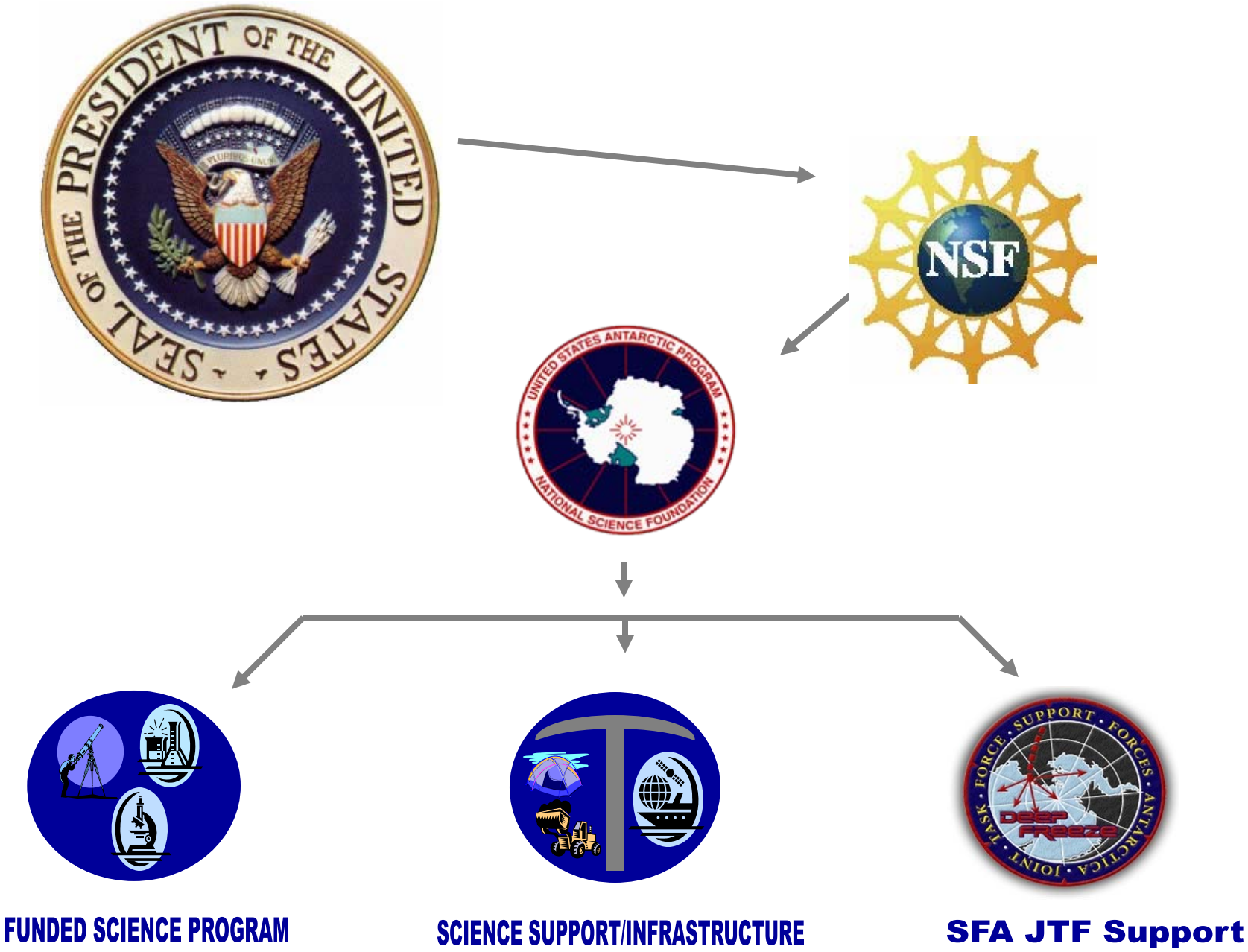
NSC-26 (1994)

Stated objectives of U.S. policy in Antarctic

- protecting opportunities for scientific research
- maintaining Antarctica as area of international cooperation for peaceful purposes
- conserving living resources in the oceans surrounding Antarctica
- protecting the environment

Implementation of Policy

- USAP implements U.S. antarctic policy in partnership with:
- Department of State and international interests
  - New Zealand
  - Chile
- Other Federal civilian agencies
  - science: NASA, NOAA, USGS
  - regulatory: EPA, DOS
- Department of Defense and U.S. Coast Guard
- Contractors

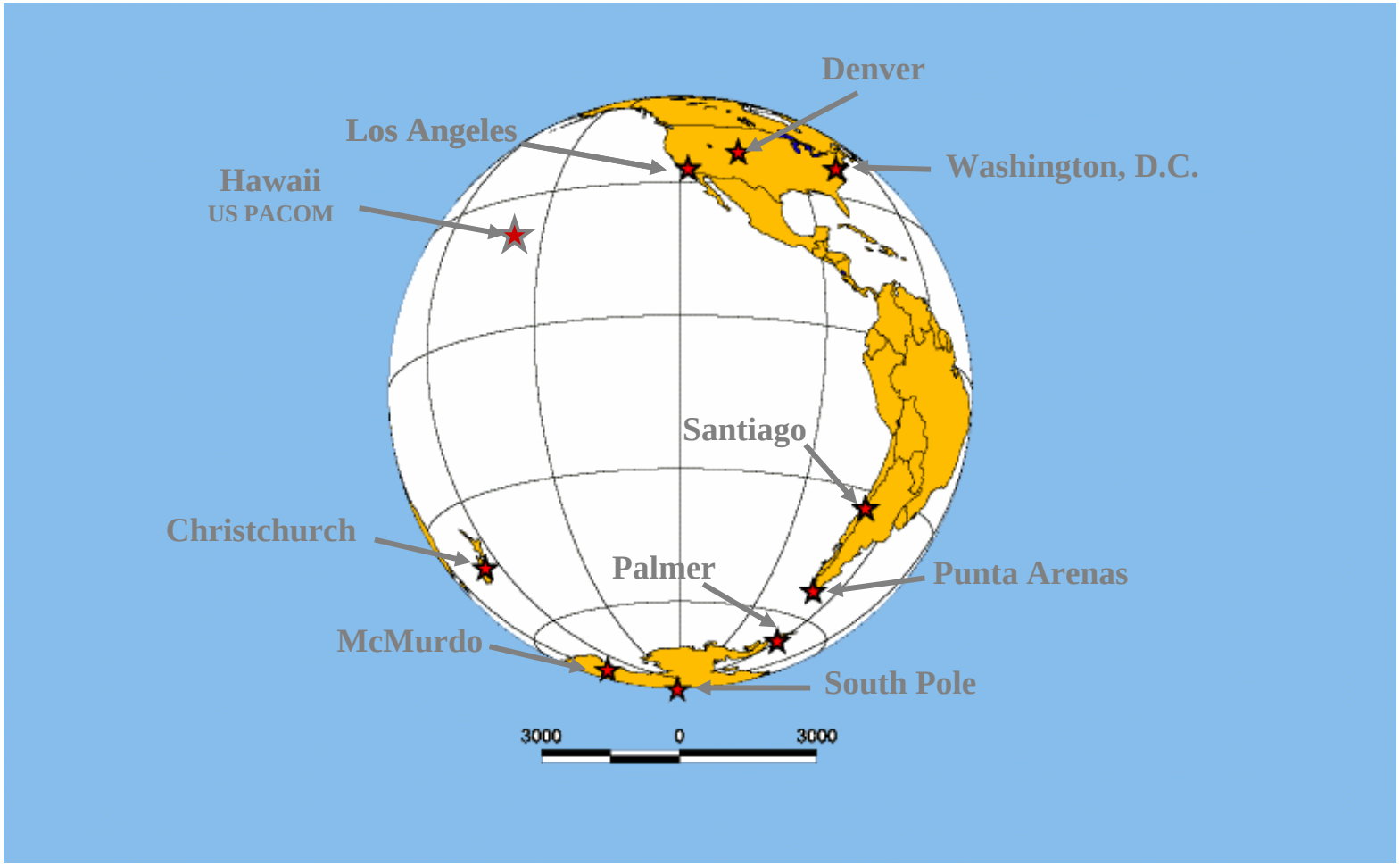

SEAL OF THE PRESIDENT OF THE UNITED STATES
NSF
UNITED STATES ANTARCTIC PROGRAM
NATIONAL SCIENCE FOUNDATION
FUNDED SCIENCE PROGRAM
SCIENCE SUPPORT/INFRASTRUCTURE
JOINT TASK FORCE SUPPORT FORCES ANTARCTICA
DEEP FREEZE
SFA JTF Support

USAP Participants

US Gov

NSF	National Science Foundation
PACOM	US Pacific Command
MSC	Military Sealift Command
AMC	Air Mobility Command
USAF	US Air Force
ANG	Air National Guard
FAA	Federal Aviation Administration
NAVCHAPS	Naval Cargo And Handling Group
USCG	US Coast Guard
NASA	National Air and Space Administration
NOAA	National Oceanic and Atmospheric Agency
SPAWAR	Space and Naval Warfare System Center
DCMA	Defense Contracting Management Agency

Scope of Organization



International Activities

- NSF coordinates all interaction with other national Antarctic programs
- Participates in the Council of Managers of National Antarctic Programs (COMNAP)
- Establishes cooperative arrangements (logistical & science)
  - Long-standing relationships with other national programs (e.g. New Zealand, Italy, Sweden)

Swedish Icebreaker Oden

Primary Themes

- The National Science Foundation is the manager of the national Antarctic program for the United States.
- Able to use any resources necessary to support the U.S. research program.
- Single-point manager for international coordination between national Antarctic programs.
- Science is the core business.

More Key Themes

- Science and operations are inseparably linked.
- The “only-in-Antarctica” test for activities
- Some parts of the USAP are like any other activity except for the geographic location.
- Level of Government involvement varies by function.
- Climate for change.

Functional Areas

From the statement of objectives:

- Technical management & administration
- Science support
- Information technology & communications
- Infrastructure, operations & professional services
- Transportation & logistics

These are just ways of organizing the services & work. Not an organizational chart.

Purpose of this Conference

- Share information on how the program works today.
  - Briefings from each major functional manager
  - Opportunities for you to understand how it all fits together.
- Official answers will be via the Q&A process

Questions?